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REVIEW OF
SB 903, SD 1, HD 2, CD 1 (1983)
RELATING TO GEOTHERMAL ENERGY

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SUMMARY

SB 903, CD 1, a bill passed by the 1983 legislature, contains a provision regarding mining leases and a number of provisions regarding geothermal resources.

The mining-lease provision relates to the possible case of a party who discovered a mineral resource as a result of exploration permitted by the Board of Land and Natural Resources and who bid unsuccessfully at the public auction of the lease to mine the mineral. The bill would provide in that case, that the successful bidder should reimburse the discoverer. The provision would be appropriate. However, the subject to which it relates is not indicated by the title of the bill and hence the provision might be found unconstitutional even if the bill is approved.

The major effect of the geothermal-resource provisions would be to establish that geothermal energy is a permissible activity in the Conservation District. However, whether in the Conservation or other land-use districts, geothermal development would be permissible, with one exception, only in Geothermal Resource Subzones to be designated by the Board of Land and Natural Resources after county-by-county assessments. The exception covers geothermal energy developments already permitted.

Geothermal energy development is not necessarily inconsistent with the intent in establishing the Conservation District. However, with respect to the environmental impacts that are the principal concern in that district, the assessments that would be required by the bill for the designation of Geothermal Resource Subzones will probably be much less thorough than the environmental impact statements that might alternatively have been required.

There are internal inconsistencies in the bill and in the accompanying committee reports as to the extent to which the requirements of the bill replace present statutory requirements for permits. It appears, however, that requirements for permits for actual geothermal development projects will remain in force and, with them, associated requirements for environmental impact statements. These include requirements for environmental impact statements for developments in the Conservation District. Hence impacts not disclosed by the Board's assessments of potential Geothermal Resource Zones in that District may be disclosed by environmental impact statements on the development projects proposed in those zones. Furthermore, the assessment requirements apply to Geothermal Resource Zones in all areas, including those where no environmental impact statements would be required under present law. Hence, inadequacies in the assessment provisions of the bill do not warrant its disapproval.

Considering the rights established by the grant of permits already issued for geothermal exploration and development, it is appropriate that the projects already permitted be exempted from the provision that geothermal projects be permitted only in Geothermal Resource Zones.

The bill includes a severability provision that would allow the geothermal-resource provisions to remain in effect even if the mining-lease provisions were found unconstitutional.

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INTRODUCTION

The purpose of SB 903 in the final form passed by the legislature, CD 1, is stated in Conference Committee report no. 56 to be "to allow the Board of Land and Natural Resources to designate geothermal resource subzones within all four (4) land use classifications: conservation, agricultural, rural and urban. In addition, the bill would allow a person who discovers mineral resources on State land to be reimbursed for the direct and indirect costs of exploration if that person is later unsuccessful in obtaining a mining lease from the State to develop that resource."

The original version of the bill, in addition to the provisions respecting mining leases, would simply have amended the State Land Use law to recognize geothermal development as one of the activities permissible within the Conservation District. Not noting these additional provisions, the Environmental Center did not review the bill, although it was prepared to comment, with respect to similar provisions in SB 1044 and HB 1042, that geothermal development could appropriately be considered permissible in certain parts of the Conservation District after the adoption of regulations identifying those parts and controlling the means of development.

Having failed to review SB 903 in the course of its consideration by the legislature, but noting concerns that have been raised about the version that has been passed, CD 1, we here review that version. As in the case of other Center reviews, this one does not reflect an institutional position of the University.

The principal concerns of the Environmental Center relate of course to the environmental implications of the adoption of the bill's provisions relating to geothermal resources. After presenting a digest of the bill and discussing its legislative history we will discuss first, in this review, the geothermal resource provisions, commenting only briefly later on the mining-lease provisions.

DIGEST OF PROVISIONS AND LEGISLATIVE HISTORY

Digest

Section 1

Section 1 of SB 903, CD 1, is a statement of findings and purpose:

The legislature finds that the development and exploration of Hawaii's geothermal resources is of statewide concern, and that this interest must be balanced with interests in preserving Hawaii's unique social and natural environment. The purpose of this Act is to provide a policy that will assist in the location of geothermal resources development in areas of the lowest potential environmental impact.

Section 2

Section 2 proposes a new subsection (b) of section 182-4, Hawaii's Revised Statutes. This new subsection would provide that the successful bidder for a lease covering the mining of a mineral resource, if the resource had been discovered by another person through exploration permitted under HRS 192-6, shall be required to pay the discoverer if the discoverer also bid on the lease.

Section 3

Section 3 of the bill proposes two new sections of Chapter 205 Hawaii Revised Statutes each with several subsections. For convenience the new sections will be referred to in this review as Sections I and II. The new governmental authority that would be created by these sections would be placed primarily with the Board of Land and Natural Resources. Recognizing that the Board will be advised by the Department of Land and Natural Resources, we will use the abbreviation B/DLNR to refer to either or both.

Subsection I(a) would allow the establishment of geothermal resource subzones in any of the State land-use districts, prohibit the exploration and development of geothermal energy except within such subzones, and prohibit the distribution of electric energy produced from geothermal sources except those in such subzones.

Subsection I(b) would place the authority to establish the subzones in the B/DLNR although it is the Land Use Commission that has established the land-use districts and may modify their boundaries, and it is the counties that have the power to determine in detail the uses of land in the agricultural, rural and urban districts other than for geothermal exploration and development.

Subsection I(c) appears to require that a project to explore or develop a geothermal resource would, in addition to being restricted to one of the zones, be subject to permission by the B/DLNR, if within the conservation district, or to permission by the appropriate county agency if within the agricultural, rural, or urban districts. The subsection would also continue in effect all present provisions of the State Environmental Impact Statement (EIS) Act respecting the permit applications and, in addition, provide for contested-case hearings on the applications.

Several of the subsections of Section II relate to the designation of the geothermal resource subzones. Subsection II(a) would: i) require the B/DLNR to assess areas of geothermal

potential in all counties for such designation and to update the assessments at no less than 5-year intervals; ii) allow persons with interests in geothermal development to petition for subzone designations; and iii) exempt the designation process from the requirements of the State Environmental Impact Statement (EIS) act. Subsection II(b) specifies certain factors that would have to be taken into account in the assessments. Although subsection II(c) would allow the B/DLNR discretion in its assessment methods, subsection II(d) would require a public hearing on the B/DLNR's proposals for subzone designations in each county prior to the actual designations.

Subsection II(e) would provide for B/DLNR's cancellation of subzone designations and Subsection II(f) would exempt geothermal exploration and development projects already permitted from both the subzone and permit requirements of the Act.

For brevity in our discussion of the legislative history of the bill and the effects of the final version, we will generally refer to a geothermal resource subzone as a GRZ, to geothermal energy development in general as GRD, to a project to explore for or develop geothermal energy as a GRP and to an environmental impact statement as an EIS.

Sections 4 to 6

Section 4 and 5 of the bill are, respectively, the editorial explanation and severability provisions that are conventional. Section 6 provides that the Act proposed shall take effect upon its approval.

Legislative history

Original version of SB 903

The original version of SB 903 included the provision relating to mining leases that was included in the final version. With respect to geothermal resources, the original version would simply have included geothermal resource development (GRD) in the list of activities permissible in the Conservation District in HRS 183-41, making no distinction between parts of the district in which GRD might be permissible and parts in which it would not. Its provision regarding GRD would thus have been similar to that of SB 1044 and HB 1042.

SD 1

The original version was amended by the Senate Committee on Economic Development (Stdg. Comm. Rpt. 519). The amended version (SD 1) would have provided for the designation of areas in which GRD would be appropriate, referring to such areas as Appropriate Geothermal Resource Areas (AGRA's) rather than Geothermal Resource Subzones (GRZ's). The designation would have been by the B/DLNR on the basis of periodic assessments considering geologic hazards, environmental impacts, and both the potential for development of geothermal energy and the potential for its use. Criteria for designation would have been high potential for development and use and low hazards and impacts.

Under SD 1, AGRA's could have been established in any land-use district, but to establish one in the Conservation District, the B/DLNR would have had to petition the Land Use Commission for the establishment of a subzone. For the establishment of a subzone, the Commission would have had to consider that State 25-year alternate energy needs could not be met by other means, and would have had to restrict the area of the subzone to the minimum necessary. The bill would have restricted use of such a subzone to GRD alone.

HD 1

SD 1, after passage by the Senate and referral to the House, was further amended by the House Committees on Water, Land Use, Development and Hawaiian Affairs and on Energy, Ecology, and Environmental Protection (Stdg. Comm. Rpt. 723).

In the amended version, HD 1, the terminology AGRA's was altered to GRZ's, and the requirement that the Land Use Commission be involved in the establishment of a GRZ was deleted. In the criteria for establishing a GRZ, the impacts were enlarged to include social impacts as well as environmental impacts; and to the original criteria were added the potential for negative environmental impacts on surrounding land uses and the potential for development of related industries. The designation of a GRZ would require good potential for production and utilization of geothermal energy and minimal negative social and environmental impacts and disruption of uses in surrounding lands. HRS 343 (the EIS law) would remain in effect and its application to GRZ designation would not have been invalidated. HD 1 added the provisions retained in CD 1 as to methodology and information used in assessment. It would have provided that no GRZ could be established until an island assessment had been completed, and that the finding of the B/DLNR that GRD was appropriate in a GRZ would be binding on other agencies.

HD 2

HD 1 was later amended by the House Committee on Finance (Stdg. Comm. Rpt. 821). In the amended version, HD 2, the subsection of HD 1 containing the criteria for designating GRZ's was deleted on the grounds that the application of those criteria and others would be best at the project (GRP) permit stage, on the basis of information to be provided through EIS's.

CD 1

HD 2 after passage by the House and referral back to the Senate, which disagreed with the House amendments, was still further amended by a Conference Committee (Conf. Comm. Rpt. 56 to the Senate, Conf. Comm. Rpt. 60 to the House).

The final version, CD 1, differed from HD 2 principally in the addition of language making GRZ designations exceptions to county and Land Use Commission powers, but also language continuing the applicability of B/DLNR and county permit requirements to GRP's; in the addition of an allowance that property owners might petition the B/DLNR for GRZ designations; in exempting of the GRZ designations from EIS requirements; in the addition of the compatibility of GRD and related industries with Conservation District uses as a factor to be considered in the case of a GRZ in the Conservation District; in deleting of the provision that the B/DLNR findings of the appropriateness of GRD in its establishment of a GRZ would be binding on the counties; and in "grandfathering" already permitted GRP's.

PROVISIONS REGARDING GEOTHERMAL RESOURCES

Major effect

A major issue concerning geothermal resource development has been whether such development should be permitted in the Conservation District considering the intent in the creation of that district of restricting the uses of land in the district to those conservative of the natural environment. This issue, at least, would be resolved unambiguously if the bill were approved. Subsection I(a) would clearly allow the designation of geothermal resource zones in the Conservation District as well as in other land-use districts. The terminology applying to these zones suggests merely recognition of the presence of geothermal resources within them. However, the language of subsection (a) indicates that geothermal development would be permissible only in the designated GRZ's. The zones could therefore have been referred to more exactly as zones of permissible geothermal development, or simply geothermal development zones.

It has been argued that, even if in society's best interest geothermal energy development should be allowed in some part of what is now the Conservation District, that part should be removed from the district by a boundary change before the development is permitted. However, there is no specific statutory prohibition of energy development in the Conservation District, and there is precedent for the allowance of energy developments of other sorts in that district. In it there are already several streamflow diversions for hydroelectric power development and hydroelectric power plants, and a few more hydroelectric power projects are proposed. The merits of the argument appear to depend on the magnitude of the detrimental impacts of geothermal energy development on the natural environment relative to the magnitude of the detrimental impacts of hydroelectric energy development.

There is clearly a considerable potential for detrimental impacts of GRD, including air pollution, excessive noise, and possibly water pollution, that would not result from hydropower development. However, contrary claims notwithstanding, it is clear from experience with the State geothermal well on the east rift of Kilauea Volcano that the emission of air pollutants can be controlled so that they are insignificant in comparison with the natural emissions from the rifts; that the noise levels can be reduced significantly; and that the water pollution impacts in that case are not significant. In contrast, hydropower projects require stream diversions and result in the diminution of low-water stream flows that are not associated with GRP's. Whereas GRP's require steam conduits, hydropower projects require water conduits, and although the complexity of the conduit system is more likely to be greater with a GRP, a greater conduit length is likely to be required with a hydropower project. Both kinds of projects require access roads, and whereas a more complicated pattern of roads is likely to be required by a GRP, a road in steeper terrain is likely to be required by a hydropower project. Both kinds of projects would require electric transmission lines whose length in the Conservation District would depend on location of the power plants.

In summary, with two qualifications, we do not consider illogical the allowance of geothermal energy development within the Conservation District. The two qualifications are: 1) that the development be restricted to zones in which the environmental impacts of the development will be least detrimental; and 2) that individual geothermal projects be so designed and operated as to minimize the detriments. The extent to which the provisions of SB903, CD 1 meet these qualifications will be discussed below.

Assessments of potential GRZ's

Introduction

Because the principal concerns regarding geothermal energy development, whether in the Conservation District or elsewhere, are with its environmental impacts, there is reason to give special attention to the provisions of the bill regarding address to the environmental impacts in the assessments required in subsection II(a) for GRZ designation. Subsection II(b) lists seven factors whose consideration would be required in an assessment. Three of these factors relate specifically to environmental impacts: (3) the geologic hazards to GRP's in the GRZ; (4) the environmental impacts of GRD generally; and, in the case of a GRZ in the Conservation District, (7) compatibility of GRD with the uses intended in the designation of the District.

As will be shown, each of these factors and all of the others whose consideration would be required would have to be covered in an environmental assessment made under the State Environmental Impact Statement (EIS) Act. However, subsection I(a) would exempt B/DLNR's designation procedure from the provisions of the EIS Act.

The EIS Act provides for a two-stage evaluation process: i) an initial evaluation, termed an assessment, undertaken to determine whether a full-scale EIS is required; and ii) the more thorough evaluation whose results are presented in the EIS if it is required. In our opinion, because of scale effects, only geothermal developments of considerable size can be undertaken with the hope of profit, and hence their environmental impacts of the developments will inevitably be significant, so that there would be no need for an initial evaluation to determine the need for the more thorough evaluation if the EIS system were applicable to the establishment of GRZ's. Whether or not the assessments required in the bill are an adequate substitute for the parts of the EIS system other than the initial evaluation depends on several factors meriting individual discussion.

Together, subsections II(a) and II(d) require that each assessment will apply to a county. We assume, however, that in each assessment there must be a section or parts of several sections that are specific to each possible GRZ in the county. In itself, of course, the designation of a GRZ will not have any physical environmental impact, and the only concern is with the impacts of the GRP's that would be permissible in the GRZ's. It is, however, appropriate to compare the assessments as they would apply to individual prospective GRZ's with provisions of the EIS Act that might alternatively have been applied to GRZ designation. We will make this comparison with respect to the coverage of GRZ's whose designation is being considered, the topics requiring address in the consideration, the information to be used in the consideration, and the process of consideration.

Coverage

Actions that will have significant environmental impacts must be covered by EIS's under the EIS Act only if the actions will involve the use of state or county land or funds or if they require governmental permits and will be carried out in the Conservation District, the shoreline area, a historic site, or the Waikiki-Diamond Head area or will involve a county general plan amendment. Under the bill, assessments would be required for possible GRZ's no matter where they are located. Approval of the bill would therefore result in the assessment of possible GRZ's for which the EIS Act does not at present require EIS's, principally those in the Agricultural District. It would, of course, have been possible to extend the coverage of the EIS system so as to make it applicable to all GRZ's.

Topics addressed

Briefly paraphrased, the 15 items in the EIS content requirements prescribed in EIS-system regulations are as follows:

EIS

- | | |
|---|--|
| a. Summary | i. Proposed mitigation measures |
| b. Project description | j. Irreversible resource commitments |
| c. Environmental setting | k. Benefits in accord with official policies offsetting environmental detriments |
| d. Relation to land use policy | l. Organizations and persons consulted |
| e. Probable environmental impacts | m. Their comments, and responses to the comments |
| f. Probably unavoidable adverse environmental effects | n. Unresolved issues |
| g. Alternatives to action | o. Necessary approvals |
| h. Short-term vs. long-term comparison | |

All seven of the GRZ assessment topics have equivalents among the EIS content requirement, if the latter are interpreted in ways for which there are precedents, as indicated in the following table:

<u>GRZ assessment topic</u>	<u>EIS topic</u>
(1) Potential for energy productivity	Benefits offsetting environmental detriments (k)
(2) Prospects for utilization of energy	
(3) Geologic hazards	Natural hazards (c and/or e)
(4) Social and environmental impacts	Impacts (e, f, h, and j)
(5) Compatibility with present land	Relationship to land-use policy (d) uses and land-use policy
(6) Potential economic benefits	Benefits offsetting environmental detriments (k)
(7) Compatibility with conservation land uses, if in Conservation District	Relation to land-use policy (d)

However, for eight of the EIS content requirements there are no equivalents among the GRZ assessment requirements:

- | | |
|------------------------|--|
| a. Summary | l. Organizations and persons consulted |
| b. Project description | m. Comments and responses |
| g. Alternatives | n. Unresolved issues |
| i. Mitigative measures | o. Necessary approvals |

A summary of the results of the assessment of a prospective GRZ would be as helpful as the summary of an EIS On the GRZ.

The only alternative to designation of a possible GRZ would be failure to designate it. However, there would generally be alternatives as to its size and shape that should be considered in its assessment.

Because a GRZ assessment would not relate to a particular GRP, there could, of course, be no precise equivalents in the assessment to the project description, the discussion of alternatives to the project, the proposal of measures intended to mitigate the undesirable impacts of the project, or the identification of approvals that would be necessary for the project, that would be required in an EIS. However, the designation of a GRZ must be based on at least an implied understanding of the range of GRP's that would be permissible in it, and the kinds of impact mitigation measures whose adoption could be required through permit conditions; and it would be best if these understandings were made explicit. Similarly, a list of the approvals that would be necessary for the undertaking of individual GRP's in the GRZ would be helpful to those who might be interested in proposing the GRP's.

However, in the process for GRZ consideration that would be required in the bill, there are no possible equivalents to the organization and persons consulted, their comments and responses, and issues unresolved by the responses.

Information used

As has been pointed out the Environmental Center in reviews of the EIS system, there can be no assurance that all of the environmental impacts of an action could be identified and evaluated in advance even with the most exhaustive analysis feasible. All that can be reasonably be expected of the system is that the description of the impacts in the EIS on a particular action is sufficiently comprehensive and reliable to provide a sound basis for the decision whether or not the action should be taken. In our opinion, the preparation of the EIS's on some projects has entailed unnecessary expense in seeking information not pertinent to the environmental impacts of the projects. However, the undertaking of research projects of modest scope is often necessary to provide adequate comprehensiveness and reliability in EIS's.

With respect to the conduct of the assessments of proposed GRZ's that would be required by the bill, subsection II(c) provides that: "Methods for assessing the factors in subsection (b) shall be left to the discretion of the board and may be based on currently available public information." We believe the intent of the subsection is that the methodology of analysis is left to the discretion of the B/DLNR and that information utilized in the analysis may be limited to that which is publicly available without even minimal research. This interpretation is supported by the statement in the Conference Committee reports (page 2, paragraph 3) that the B/DLNR "may use currently available public information...rather than engaging in an extensive and costly survey throughout the State." The B/DLNR

would be encouraged by the language of the bill, and particularly that of the Conference Committee reports, to avoid undertaking any research in its assessment of potential GRZ's. Furthermore, it would be encouraged to consider in its assessments only the information in governmental files, regardless of the availability of pertinent information elsewhere. The problem with this limitation on the information to be taken into account on the assessments is exacerbated by the process prescribed for public consideration of the assessment.

Factor weighting

Subsection II(d) would require that the B/DLNR "compare all areas showing geothermal potential within each county, and shall prepare areas for designation as geothermal resource subzones based on a preliminary finding that the areas are those sites which best demonstrate an acceptable balance between the factors set forth in Subsection (b)" and, in part (3) of that subsection, that the B/DLNR, may designate as GRZ's only those areas that appear best after the hearing on the proposal. How the balance is to be made is not specified. The Conference Committee reports (page 2, paragraph 3) state that the B/DLNR would "be required to give higher priority to designate areas as subzones which have a high likelihood of development by the land owner than those areas which are likely to remain undeveloped but also (page 3, paragraph 2) that the provisions of the bill "will require that all seven criteria will be required equal consideration in the designation of a subzone."

It would be pointless to designate as a GRZ an area in which GRD is improbable, but the designation would be equally appropriate whether the probable development would be by the current landowner or by some other person with a transfer of landownership or by the permission of the current landowner.

All seven assessment factors must clearly be considered by the B/DLNR in deciding what areas should be proposed as GRZ's. However, neither weighting stressing the relative probability of development (so long as there is a significant probability), nor equal weighting, would be consistent with the purpose expressed in Section 1 of the bill to provide for location of GRD "in areas of the lowest potential environmental impact."

Process

The EIS-system Act, if it were applicable, would not affect B/DLNR's authority to designate GRZ's and under the Act. Under the provisions of the EIS Act it is the B/DLNR that would be responsible for preparation of the EIS on a prospective GRZ, just as under subsection II(a) proposed in the bill it is B/DLNR that would be responsible for the assessment. In other respects, however, there are distinct differences between the process of consideration of a prospective GRZ that would be involved if the EIS system were applicable and that prescribed in the bill.

In the EIS system, provision is made for interested members of the public to express their concerns with a proposed action when the EIS preparation notice on that action has been issued; response to the concerns expressed must be made in the EIS; the EIS must be made available for public review; and it must be revised in response to review comments before its acceptability is determined. These provisions very frequently result in bringing to the attention of the preparers of the EIS's, including governmental agencies, not only potential impacts they had not initially recognized, but information bearing on the evaluation of the impacts they had recognized. The determination that the EIS on an action is acceptable after the post-review revision, in other words the determination that the information in it is valid and provides an adequate basis for a decision whether or not the action is appropriate, is regarded in the EIS system as separate from the latter

decision whether or not the action should be taken. In the case of an action to be taken by a state agency, such as the designation of a GRZ by the B/DLNR, the acceptability of the EIS is determined by the Governor; and the Environmental Quality Control Act provides that the Office of Environmental Quality Control (OEQC) may advise the Governor.

The only public involvement that would be required in the consideration of a prospective GRZ under the provision of the bill is through the public hearing that the B/DLNR would have to hold prior to its designation. To comment intelligently on the designation proposal, the public would have to have convenient access to the B/DLNR's assessment, but the bill requires only that the public be notified of the hearing. With access to the assessment, the public might bring to attention pertinent information not reflected in the assessment and methodologies of analysis preferable to those employed in it. However, because the primary topic to be considered at the hearing is the designation itself, not the adequacy of the assessment, it may be expected that most testimony will reflect subjective value judgements as to the appropriateness of the designation of the GRZ rather than critiques of the objective information on which those judgements should be based.

The BLNR might take into account inadequacies in its assessment that were brought to light in the hearing, but there is no provision in the bill for revision of the assessment prior to the designation decision. The record of the public hearing would presumably list those who testified and summarize their testimony, but there would be no occasion for response to claims of inadequacy of the assessment or for recognition of unresolved issues equivalent to the responses and recognitions for which there are provisions in the EIS system.

Although the bill requires that the State Department of Planning and Economic Development and the planning commission of the county be permitted to appear, no involvement of this Office of Environmental Quality Control is prescribed.

Summary

Extension of the EIS system to cover all proposed GRZ's, regardless of their location, would have seemed in accord with the purpose of assuring that GRD will be located "in areas of lowest potential impact" expressed in Section 1 of the bill. The assessment system that would be substituted for the EIS system under the bill, at least with respect to GRZ designation, would have the advantage that it would cover all GRZ's, whereas with the present coverage limitation of the EIS system, EIS's would be required for only those GRZ's in the Conservation District. For one of those GRZ's, however, the assessments that would be required by the bill are likely to be considerably less thorough than EIS's because:

- i) the B/DLNR would be encouraged to rely entirely on in-house information;
- ii) the bill makes no provision for public critique of either the information or the methods of its analysis except at a public hearing whose subject is the appropriateness of the GRZ designation, not the adequacy and validity of the information on which the designation should be based; and
- iii) the B/DLNR would be the sole judge of the adequacy of its own assessment.

Specifications as to the weight to be given to the several factors to be considered in assessing a potential GRZ are inconsistent with mutually and with the expressed purpose of the bill.

The significance of inadequacies of environmental impact assessment of potential GRZ's in the Conservation District depends upon what environmental impact assessment would be required of individual GRP's in that district. EIS's would be required for such GRP's if they would require Conservation District Use Permits. The significance thus depends on the continuance or discontinuance of the requirement for such permits.

Requirements for permits and EIS's for individual GRP's

Requirements for permits

SB 903, CD 1 provides no new constraints on GRD other than that GRP's may be permitted only in designated GRZ's. There seems, however, to be considerable difference in opinion whether the bill in effect repeals present permit requirements. These present requirements include, not only those for Conservation District Use Permits, issued by the B/DLNR, but those for Special Use Permits for non-agricultural developments in the Rural and Agricultural Districts, issued by the county planning commissions, and those for county permits of a number of other types for developments in the Urban and Rural Districts, as well as drilling permits issued by the B/DLNR for geothermal wells wherever situated. The differences of opinion stem from inconsistencies in the bill.

On the one hand Section I (b) provides that: "The board shall adopt, amend, or repeal rules related to its authority to designate and regulate the use of geothermal resource subzones..." and that "The authority of the board to designate geothermal resource subzones shall be an exception to those provisions of this chapter and of Section 46-4 authorizing the land use commission and the counties to establish and modify land use districts and to regulate uses therein." This language would suggest that county authority to regulate GRD in the GRZ's would be replaced by B/DLNR authority, and that all requirements for county permits for GRP's, including Special Use Permits, were cancelled.

On the other hand, subsection I (c) would provide that the use of a GRZ "shall be governed by the board within the conservation district and by existing state and county statutes, ordinances, and rules within the agricultural, rural, and urban districts..." and goes on to provide for the holding of contested case hearings by the board and/or appropriate county agency "prior to the issuance of a geothermal resource permit relating to the exploration, development, production, and distribution of electrical energy from geothermal resources."

The Conference Committee reports also are inconsistent with respect to permit authority, stating (p. 1, para. 3):

Under the provisions of this bill, the Land Board would have the sole authority to: (1) designate subzones; and (2) to control geothermal development within those subzones. Your Committee believes however, that the better approach would be to have the counties control development within the agricultural, rural and urban districts once a subzone has been established by the Land Board. S.B. No. 903, S.D. 1, H.D. 2, has therefore been amended to continue the present system of county control within these three land use designations.

The second sentence of the quoted paragraph indicates the Conference Committee intent to allow the counties to retain control of actual GRD within a GRZ designated by the B/DLNR, and the third sentence indicates the belief of the Committee that HD 2 of the bill was amended in CD 1 in accord with that intent. However, the first sentence suggests

that the B/DLNR would have sole authority not only to designate GRZ's, but to control GRD within them. Reference to the HD 2, the version of the bill amended by the Conference Committee is of help in resolving the intent of CD 1. The combination of subsections I(b) and I(c) in CD 1 is represented in HD 2 by a single subsection, I(b), which would have given the B/DLNR exclusive authority over GRD in the GRZ's. It therefore appears that the Conference Committee intended that the counties should retain the permit granting authority that would have been taken away from them by HD 2.

It is, hence, our opinion that, under the provisions of CD 1, the restriction of GRD to GRZ's to be designated by the B/DLNR is a constraint additional to present permit requirements, and that the present requirements applying to the B/DLNR drilling permits, B/DLNR permits for GRP's in the Conservation District, and county permits for GRP's in the Urban, Regional and Agricultural Districts remain in effect.

Requirements for EIS's

Under the State EIS law (HRS 343), the EIS system covers proposed actions in the Conservation District, the shoreline area, historic sites, or the Waikiki-Diamond Head area if the actions require governmental permits. Although subsection II(a) of SB903, SD 1 would explicitly exempt GRZ designations from EIS-system requirements, subsection I(c) would explicitly continue the present applicability of EIS-system requirements to permits for GRP's. Because it is inconceivable that a GRP will have no significant impacts, the continuance of present applicability of permit requirements to GRP implies that an EIS will have to be prepared for every GRP in the Conservation District, and for GRP's in other districts if within historic sites, etc. At least with respect to GRD in the Conservation District, there is thus the potential for remedy of any inadequacy in environmental impact analysis in the assessment of the GRZ in which it is proposed.

Jurisdictional aspects

State vs counties

If our interpretation is correct, the final authority of the counties to permit or forbid the undertaking of GRP's in the Urban, Rural, and Agricultural Districts would not be cancelled by the enactment of SB 903, CD 1, but their authority to issue permits would be limited to GRP's in GRZ's designated by the State B/DLNR.

B/DLNR vs Land Use Commission

In granting a Conservation District Land Use Permit for a geothermal exploration project in the Conservation District, the B/DLNR has already assumed that GRD is an activity permissible at least in some parts of the district. Without a judicial finding of invalidity of the assumption, it is unnecessary to change the land-use designation of what is now part of the Conservation District in order to permit GRD there.

The powers of the Land Use Commission are limited to amendments of land-use district boundaries and to general prescriptions of uses within each district. They do not include powers to regulate land uses otherwise. Because GRZ's could be established in any land-use district, it would make no difference to the validity of a GRZ if the Land Use Commission reclassified the land on which it was located, say from agricultural to conservation use. Hence, although subsection I(b) describes the authority of the B/DLNR to designate GRZ's as an exception to the powers of the Land Use Commission, and subsection II(c) states that the Commission's approval shall not be required for use of the GRZ's, without

the judicial finding of invalidity referred to above, the bill would not actually limit the powers of the Commission. Such a finding is unlikely considering the legislative finding in SB 903, CD 1 that GRD is a permissible activity in parts of the Conservation District.

Numbers of GRZ's

Although neither a maximum nor a minimum would be set for the number of GRZ's that may be established in a county, some constraint on the number is implied by the provision that only the "best" of the geothermal resource areas should be actually designated as GRZs. It is likely, of course, that no GRZ designation will appear appropriate in some county, for example Kauai. The rationale for limiting the number in a county in which there is significant GRD may well be that a single large GRP could more than satisfy the foreseeable market for energy in the entire county. However, if inter-island transmission of electric power proves technologically feasible and economically practicable, the energy-needs constraint may effectively be removed, and with larger numbers of GRZ's there would be more opportunity for competition in GRD.

Exemption of GRP's already permitted

So far as we are aware, there are only four GRP's for which permits are at present valid, all located on the East Rift of Kilauea Volcano:

1. The State GRP in Agricultural District lands of the ahupuaa of Kapoho;
2. A GRP begun by the Puna Geothermal venture in Agricultural District lands of the same ahupuaa;
3. One begun by Barnwell Geothermal Venture in Agricultural District lands of ahupuaa of Pokoiki, Keahialaka, and Opihikao; and
4. One proposed by a Campbell Estate-True/Mid Pacific joint venture in Conservation District lands of the ahupuaa of Kahaualea.

To the extent that permits have been issued for these projects they would be "grandfathered" by subsection II(f).

The "grandfathering" is clearly appropriate in the case of the State GRP, which has been covered by EIS's and for which permits have been issued for both the geothermal well, already drilled and tested, and the power plant, already in operation. An alternative to the means of "grandfathering" provided in the bill would have been to require the BDLNR to designate the vicinity of the State GRP as a GRZ, the extent of which would be determined on the basis of the appropriateness of further exploration or development in that vicinity.

The Puna and Barnwell GRP's were not covered by the EIS-system, but an EIS was required for the Campbell GRP because it is in the Conservation District. We considered the EIS quite inadequate, although it might have been adequate if the reports of all of the studies on which it was supposedly based had been published. In the case of each of these three GRP's, the permits cover only exploration, not development. Two exploratory wells have been drilled in the Puna GRP and two in the Barnwell GRP but none yet in the Campbell GRP. Both subsection II(f) and the Conference Committee reports indicate that, before permits for actual development by these three ventures could be issued, the development project areas would have to be designated GRZ's.

It has been argued that even further geothermal exploration should have been prohibited except within GRZ's. We recognize that in the case of the Campbell/True GRP, some of the major impacts will be those of the access road that will have to be constructed for the exploratory phase. Nevertheless, we consider that it would have been inappropriate to cancel the exploration rights granted under permits already issued.

There seems a clear implication in the issuance of a permit for geothermal exploration that the issuing agency considered probable the appropriateness of later issuance of a development permit if the exploration indicated the practicality of development. However, no actual development rights have been created by the exploration permits, and we consider appropriate the limitation of the "grandfathering" of these explorations GRP's to the exploratory phase alone. The anomalies created by their grandfathering will disappear with the expiration of the permit periods.

Summary and conclusions

In summary, because geothermal resource development is appropriately permissible in some areas but not in others, it is rational to designate in what zones such development may be permissible. Such area-specific designation is appropriate in the Conservation District as well as other land-use districts. Hence, in general intent, the provisions of SB 903, CD 1 are appropriate.

It appears that the bill would not invalidate any permit requirements stipulated by present statutes, including requirements for Conservation District Use Permits and Special Use permits for projects in the Agricultural and Rural Districts. It also appears that the bill would not invalidate present requirements for Environmental Impact Statements (EIS's) on GRP's, for example on GRP's requiring Conservation District Use permits.

The assessment procedure that would be required under the bill for the designation of geothermal resource zones, although it will entail consideration of the impacts that would be addressed in EIS's impacts, is unlikely to be as thorough as that reflected in environmental impact statements, and use of the EIS system for this purpose would have been more in accord with the purpose expressed in the bill. The Board of Natural Resources would be permitted by the bill to rely solely on its own information in the preparation of its assessment, the bill makes no provision for the involvement of the Office of Environmental Quality Control in the conduct or review of the assessments, and inadequacies of environmental impact analysis are unlikely to be remedied by public input under the public-involvement provisions of the bill. In principle, the Board might on its initiative involve the Office of Environmental Quality Control, but its seeking for information not readily available would be discouraged by the committee reports. However, considering that present uses of the EIS system in relation to individual geothermal projects will be continued, the inadequacies of the assessment procedure do not warrant disapproval of the bill, and it would be advantageous in requiring assessments of GRZ's in areas where, under present law, EIS's would not be required for GRP's.

The exemption of already permitted geothermal projects from the provision that such projects can be approved only if they are in designated zones seems appropriate.

PROVISIONS REGARDING
MINING LEASES

It is reasonable that a party exploring for a mineral resource should gain from the discovery of a resource economically developable. The new subsection, HRS 182-4b, proposed in Section 2 of the bill would provide that if the party conducting the exploration did so under permit issued by the B/DLNR under HR 182-6, and if that party bid unsuccessfully a mining lease, that party shall be reimbursed for the costs of the exploration by the successful bidder.

This provision was included in the original version of the bill and not amended in subsequent versions. In the reports of the legislative committees reviewing the original version, SB 1, and HB 1, the purpose of the provision was related to the purposes of the provisions regarding geothermal resources by language suggestions that the intention was to apply the provision to "mining" leases covering geothermal development. However, Section 2 of the bill itself relates to mining leases generally, and makes no mention of geothermal resources.

There is rationale for the proposed provision. However, it is unrelated to geothermal resources except as their development may require a "mining lease" from B/DLNR, no rationale for it is presented in the statement on findings and purpose on Section 1 of the bill; and its inclusion in the bill is not reflected in the title of the bill.

Article III, Section 15, of the State Constitution states that: "No law shall be passed except by bill. Each law shall embrace but one subject which shall be expressed in its title." We think, therefore, that there is some reason to doubt that the enactment of the provision regarding mining lease could be considered constitutional even if approved. The validity of the sections of the bill relating to geothermal resources would be unaffected by a finding that Section 2 of the bill is invalid, because the standard severability provision is made in Section 5 of the bill.